



Atty. Dkt. No. 076518-0150

JCO 3d PCT/PTO 26 APR 2002

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: JEFFERSON ET AL.

Title: MICROBIAL B-GLUCURONIDASE GENES, GENE PRODUCTION
AND USES THEREOF

Appl. No.: 09/936,759

Filing Date: 09/17/2001

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR § 1.56

Commissioner for Patents
Box PATENT APPLICATION
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR § 1.56. A copy of each listed document available to Applicants is being submitted to comply with the provisions of 37 CFR §§ 1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* prior art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR § 1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

The majority of the documents are in the English language. The relevance of the documents are discussed in the instant specification or in the Search Report for PCT/US00/07107 from which the above-captioned application is a National Stage filing under 35 U.S.C. § 371. A copy of the PCT Search Report is attached setting forth the portion of each document considered relevant by the International Search Authority. An English-language counterpart of the foreign-language documents has been provided where readily available. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR § 1.98 and MPEP§ 609).

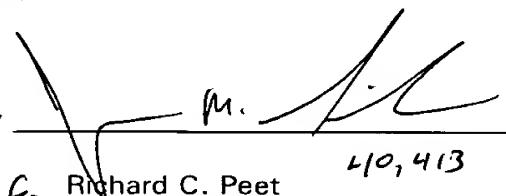
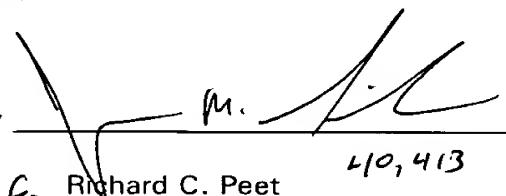
Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP § 609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 26, 2002

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5483
Facsimile: (202) 672-5399

By 
for 
Richard C. Peet
Attorney for Applicant
Registration No. 35,792
410,413

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2001

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Sheet 1 of 6

Attorney Docket Number 076518-0150

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
A1	RE 32,011			Zimmerman	10/22/1985	
A2	4,115,064			Gindler	09/19/1978	
A3	4,274,832			Wu	06/23/1981	
A4	4,298,685			Parikh	11/03/1981	
A5	4,376,110			David	03/08/1983	
A6	4,411,993			Gillis	10/25/1983	
A7	4,450,239			Chatterton	05/22/1984	
A8	4,473,640			Combie	09/25/1984	
A9	4,478,936			Herlihy	10/23/1984	
A10	4,481,195			Rubin	11/06/1984	
A11	4,486,530			David	12/04/1984	
A12	4,536,475			Anderson	08/20/1985	
A13	4,543,439			Frackelton	09/24/1985	
A14	4,551,433			DeBoer	11/05/1985	
A15	4,584,368			Rubin	04/22/1986	
A16	4,588,686			Herlihy	05/13/1986	
A17	4,736,866			Leder	04/12/1988	
A18	4,745,051			Smith	05/17/1988	
A19	4,839,293			Cantor	06/13/1989	
A20	4,870,009			Evans	09/26/1989	
A21	4,873,191			Wagner	10/10/1989	
A22	4,892,833			Weiss	01/09/1990	
A23	4,902,614			Wakabayashi	02/20/1990	
A24	4,918,066			Kump	04/17/1990	
A25	4,939,264			Heiman	07/03/1990	
A26	4,940,838			Schilperoort	07/10/1990	
A27	4,945,050			Sanford	07/31/1990	
A28	5,036,006			Sanford	07/30/1991	
A29	5,075,340			Barua	12/24/1991	
A30	5,100,792			Sanford	03/31/1992	
A31	5,110,833			Mosbach	05/05/1992	
A32	5,162,215			Bosselman	11/10/1992	
A33	5,164,180			Payne	11/17/1992	
A34	5,169,784			Summers	12/08/1992	
A35	5,187,091			Donovan	02/16/1993	
A36	5,204,244			Fell	04/20/1993	
A37	5,206,166			Payne	04/27/1993	
A38	5,218,104			Hilder	06/08/1993	
A39	5,225,539			Winter	07/06/1993	
A40	5,242,687			Tykocinski	09/07/1993	

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2See attached Kinds of U.S. Patent Documents. 3Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: April 26, 2002

APR 26 2002
U.S. PATENT & TRADEMARK OFFICE

(use as many sheets as necessary)

Sheet

2

of

6

7

8

9

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Attorney Docket Number 076518-0150

U.S. PATENT DOCUMENTS

A	U.S. Patent Document		
A41	5,243,041	Fernandez-Poi	09/07/1993
A42	5,254,799	De Greve	10/19/1993
A43	5,266,317	Tomalski	11/30/1993
A44	5,268,463	Jefferson	12/07/1993
A45	5,270,200	Sun	12/14/1993
A46	5,288,463	Chemelli	02/22/1994
A47	5,306,863	Hilder	04/26/1994
A48	5,308,760	Brown	05/03/1994,
A49	5,317,096	De Greve	05/31/1994
A50	5,328,834	Ngo	07/12/1994
A51	5,328,985	Sano	07/12/1994
A52	5,349,126	Chappell	09/20/1994
A53	5,371,015	Sanford	12/06/1994
A54	5,382,429	Donovan	01/17/1995
A55	5,395,750	Dillon	03/07/1995
A56	5,407,825	Payne	04/18/1995
A57	5,432,081	Jefferson	07/11/1995
A58	5,460,963	Boterman	10/24/1995
A59	5,464,763	Schilperoort	11/07/1995
A60	5,466,597	Peferoen	11/14/1995
A61	5,478,369	Albertsen	12/26/1995
A62	5,482,856	Fell	01/09/1996
A63	5,496,732	Smigocki	03/05/1996
A64	5,501,967	Offringa	03/26/1996
A65	5,545,808	Hew	08/13/1996
A66	5,567,607	Zhao	10/22/1996
A67	5,591,616	Hiei	01/07/1997
A68	5,605,793	Stemmer	02/25/1997
A69	5,612,317	Holick	03/18/1997
A70	5,629,183	Saunders	05/13/1997
A71	5,633,076	DeBoer	05/27/1997
A72	5,639,737	Rubin	06/17/1997
A73	5,691,179	Korsmeyer	11/25/1997
A74	5,693,761	Queen	12/02/1997
A75	5,693,762	Queen	12/02/1997
A76	5,693,769	Kahne	12/02/1997
A77	5,698,435	Robinson	12/16/1997
A78	5,723,323	Kauffman	03/03/1998
A79	5,726,031	Roth	03/10/1998
A80	5,731,179	Komari	03/24/1998
A81	5,733,744	Hamilton	03/31/1998
A82	5,741,957	DeBoer	04/21/1998
A83	5,760,008	Rubin	06/02/1998

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2See attached Kinds of U.S. Patent Documents. 3Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

SC139 301C
 APR 26 2002
 PATENT & TRADEMARK OFFICE

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Sheet 3 of 6

Attorney Docket Number 076518-0150

U.S. PATENT DOCUMENTS

		U.S. Patent Document			
A84	5,767,378		Bojsen	06/16/1998	
A85	5,770,380		Hamilton	06/23/1998	
A86	5,780,009		Karatzas	07/14/1998	
A87	5,780,225		Wigler	07/14/1998	
A88	5,840,479		Little	11/24/1998	
A89	5,849,288		Reisner	12/15/1998	
A90	5,854,009		Klug	12/29/1998	
A91	5,994,629		Bojsen	11/30/1999	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	e
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
A92	WO	95/07989			Briggs et al.	03/23/1995		
A93	WO	95/05743			Rabe et al.	03/02/1995		
A94	WO	90/11770			Davies et al.	10/18/1990		
A95	WO	95/29238			Lawrence et al.	11/02/1995		
A96	WO	95/28478			Ausubel et al.	10/26/1995		
A97	WO	95/28423			Ausubel et al.	10/26/1995		
A98	WO	94/18335			Hironaka	08/18/1994		
A99	WO	96 37609	A					
A100	WO	99 13085	A					
A101	WO	89 03880	A		Jefferson	05/05/1989		
A102	WO	00/08039	A1		Jefferson	02/17/2000		
A103	EP	0502719	A1		Duvick et al.	09/09/1992		
A104	EP	0616035	A2		Logemann	09/21/1994		
A105	EP	392225	A2		Ryals et al.	10/17/1990		
A106	EP	297944						
A107	EP	601092						
A108	JP	7274948						
A109	JP	4267876						
A110	JP	4023982						
A111	JP	6256196						
A112	JP	43-20631						
A113	JP	71-32092						
A114	PCT	US99/17804						
A115	GB	2197653 A			Jefferson	05/25/1988		

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Date Submitted: April 26, 2002

(use as many sheets as necessary)

APR 26 2002
PATENT

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Sheet 4 of 6

Attorney Docket Number 076518-0150

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
A116		Alting-Mees et al., Strategies in Molecular Biology 3:1-9, 1990	
A117		Altschul et al., Nucleic Acids Res. 25:3389-3402, Oxford University Press, 1997	
A118		Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
A119		Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
A120		Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
A121		Ausubel et al., Current Protocols in Molecular Biology, Green Publishing, 1987	
A122		Ausubel et al., supra; Sambrook et al., supra; Methods in Plant Molecular Biology and Biotechnology, Ed. Glick and Thompson, CRC Press, 1993	
A123		Ausubel, et al., Current Protocols in Molecular Biology, Greene Publishing 1995	
A124		Bayer and Wilchek J. Chromatogr. 510:3, Elsvier Science Publishing, 1990	
A125		Bevan, Nucl. Acids. Res. 12:8711, IRL Press Oxford-Washington D.C., 1984	
A126		Bird et al., Science 242:423-426, 1988	
A127		Bloch, J. Histochem. Cytochem. 41:1751, 1993	
A128		Database PIR2 'Online! EMBL Heidelberg, Germany; ID/AC AE001766; Q9X0F2, 4 June 1999 (1999-06-04) NELSON K E ET AL.: "Thermotoga maritima beta-glucuronidase" XP002144985	
A129		Diamandis and Christopoulos, Clin. Chem. 37:625, 1991	
A130		Dunn, Methods Mol. Biol. 32:227, Humana Press, 1994	
A131		Dutton, Glucuronidation of Drugs and Other Compounds, CRC Press, Inc. Boca Raton, FL pp. 13-15	
A132		Enterobacter/Salmonella, Pseudomonas, Salmonella, Staphylococcus, and Thermotoga (see, TIGR database at www.tigr.org)	
A133		Eubacteria, Archea, and Eucarya (Woese, Microbiol. Rev. 58: 1-9, 1994)	
A134		Firck et al., "Endoplasmic reticulum targeting . . ." Transgenic Res. Vol. 3:326-331, April 1994	
A135		Gene Transfer to Plants, Ed. Potrykus and Spangenberg, Springer, 1995	
A136		Henriksat B et al., FEBS Lett 27:425, 352-354, Elsevier, 1998	
A137		Henriksat, Biochem Soc Trans 26:153, 1998	
A138		Holsters et al., Mol. Gen. Genet. 163: 181-187, Springer Verlag, 1978	

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO SC139
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Sheet 5 of 6

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Attorney Docket Number 076518-0150

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A139	Huse et al., Science 246:1275-1281, American Association for Advancement of Science, 1989	
	A140	Jefferson et al. "Beta Glucuronidase from E-coli as a gene fusion marker", PNAS Vol. 83:8447-8451, Nov. 1986	
	A141	Khasarov et al., "Determination of minimal length DNA . . ." Genetika (Russia) Vol. 28(7) 38-45, July 1992	
	A142	Levvy and Conchie, 1966	
	A143	Maidak et al., Nucl. Acids Res. 27:171-173, 1999	
	A144	Mariani et al., Nature 347:737, 1990	
	A145	Nelson et al., "Evidence for lateral gene transfer between Archaea and Bacteria . . ." Nature, 399: 323-329, 1999	
	A146	Nelson et al., "Thermotoga maritime beta-glucuronidase . . ." Database PIR2 'Online' EMBL, Heidelberg, Germany, ID/AC AE001766; Q9X0F2, 4 June 1999, nucleotides 4542 to 6233	
	A147	Novel and Novel, Nol. Gen. Genet. 120:319-335, 1973	
	A148	Ribosomal Database Project of Michigan State University, dpwww.life.uiuc.edu	
	A149	Richards, Methods Enzymol. 184:3, Academic Press, Inc. 1990	
	A150	Russel et al., "Identification and Cloning of gusA . . ." Applied and Environmental Microbiology 67: 1253-1261, 2001	
	A151	Sakaguchi et al., "Beta Glucuronidase . . ." Zentralblatt Bakteriol. Mikrobiol. Ser. A. Vol. 257(3) 308-316, March 1984	
	A152	Sambrook et al. Molecular Cloning: A Laboratory Manual, 2nd ed., Cold Spring Harbor Press, 1987	
	A153	Sambrook et al., Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Press, 1989	
	A154	Sastray et al., Proc. Natl. Acad. Sci. USA 86:5728-5732, 1989	
	A155	Scatchard, Ann. N.Y. Acad. Sci. 51:660-672, 1949	
	A156	Strunk et al., Electrophoresis 19: 554, 1998	

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Complete if Known		
			Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)	
			Filing Date	09/17/2001	
			First Named Inventor	Richard A. JEFFERSON	
			Group Art Unit	Unassigned	
			Examiner Name	Unassigned	
(use as many sheets as necessary)					
Sheet	6	of	6	Attorney Docket Number	076518-0150

APR 26 2002
U.S. PATENT AND TRADEMARK OFFICE
SC139

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ⁶
	A157	Tapsall et al., "Beta Glucuronidase . . ." Daign. Microbiol. Infect. Dis. Vol. 22:261-266, 1995		
	A158	Tomasic and Keglevic, Biochem J 133:789, 1973		
	A159	Von Heijne, J. Mol. Biol. 184:99-105, 1985		
	A160	Wilchek and Bayer, Methods Enzymol. 184:14, Academic Press Inc., 1990		
	A161	Wilchek and Bayer, Methods Enzymol. 184:467, Academic Press Inc., 1990		
	A162	Wilson et al, "The Escherichia coli gus operon: induction and expression of the gus operon in E. coli and the occurrence and use of GUS in other bacteria" 1992, page 7-22, XP 002093517		
	A163	Wilson, K. J. et al., "The Escherichia coli gus operon: induction and expression in E. coli and the occurrence and use of GUS in other bacteria" GUS Protocols: Using the Gus Gene as a Reporter of Gene Expression, 1992, pp. 7-22, XP002093517		
	A164	Wong et al. J. Biol Chem. 18: 34057, American Society for BioChemistry and Molecular Biology, 1998		
	A165	Wilcheck and Bayer, Methods Enzymol. 184:4, Academic Press, 1990		
	A166	Sakaguchi et al, "Beta Glucuronidase...Zentralbl Bakteriol.Mikrobiol.Ser.A. Vol.257(3) 308-316, March 1984		
	A167	Wolf, Monika Genes Encoding Xylan and B-Glucan Hydrolysing Enzymes in Bacillus Subtilis; Characterization; Mapping and Construction of Strains Deficient in Lichenase, Cellulas and Xylanase, 1995 Microbiology, Vol. 141. Pp. 281-290		
	A168	Yonging, Chen Molecular Cloning and Expression of Bacillus Subtilis bgIS Gene in Saccharomyces cerevisiae. Current Microbiology Vol. 25 (1992) pp. 279-282		
	A169	Khasanov, Fuat K. Homologous Recombination Between Plasmid And Chromosomal DNA in Bacillus Subtilis Requires Approximately 70 Bp Of Homology. Molecular & General Genetics Vol. 234 (1992) pp. 494-497		
	A170	Ludwig, C. Bacterial Phylogeny Based on Comparative Sequence Analysis Electrophoresis 19:554-568 Wiley-VCH Verlag Weinheim Germany 1998		
	A171	Woese, C. There Must Be a Prokaryote Somewhere: Microbiology's Search for Itself Microbiological Reviews Vol. 58:1:1-9 American Society for Microbiology 1994		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.